Marvine Colliery, Washery Pump W side of Boulevard Ave., between E Parker St. and I Rt. 380 Scranton Lackawanna County Pennsylvania

HAER No. PA-183-H

HAER
PA
35-SCRAN,
6H-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
MID-ATLANTIC REGION, NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
PHILADELPHIA, PENNSYLVANIA 19106

# HISTORIC AMERICAN ENGINEERING RECORD

## Marvine Colliery, Washery Pump

#### HAER No. PA-183-H

Location:

Northwest of Marvine Colliery No. 2, near the east bank of the Lackawanna River,

on the northeast portion of the Marvine Colliery east site, near Route 380 to the

north

Scranton, Lackawanna County, Pennsylvania

UTM: Z18 E446109 N4588060

Quad: Scranton

Dates of Construction:

Circa 1920

Present Owner:

Louis and Dominick DeNaples

F & L Realty

Present Occupant:

Vacant

Present Use:

None

Significance:

Marvine Colliery is important to local history for its relationship to the development of the Anthracite Mining Industry in northeast Pennsylvania, "The Anthracite Capital of the World" 1890-1930. Large and powerful washery pumps of this type were important to the anthracite mining industry of the early twentieth century, providing the great quantities of water necessary for the operation of coal processing, sorting, and cleaning equipment. The Marvine Colliery washery pump is an example of the type of pumps that the Delaware and Hudson Coal Company used to pump

85,000,000 tons of water annually at the height of its operations.

Project Information:

This documentation was undertaken in April 1990, in accordance with a resolution by the board of commissioners of Lackawanna County, Pennsylvania, as a mitigative measure prior to partial demolition of the Marvine Colliery to make way for construction of the Lackawanna County Recycling Center on the site.

construction of the Lackawanna County Recycling Center of

Dorothy Allen Silva Architectural Historian 1288 Layton Road

Clarks Summit, Pennsylvania 18411

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### **LOCATION**

The only extant Marvine Colliery washery pump is located on the colliery's east site, close to the Lackawanna River, northwest of Breaker No. 2, near Interstate 380 and directly west of the Lackawanna County Recycling Center. This pump is located in a depression at the center of a large concrete and steel-lined washery pool.

## **HISTORY OF EQUIPMENT AND OPERATIONS**

In the Delaware and Hudson Coal Company's 1932 publication, The Story of Anthracite, the descriptions of the wet method of processing anthracite for market refer to "jets of water" ... "cascades of water" ... "a constant flow of water" ... for the operation of the jig and cone separators. Water was also used in the coal sizing process as well as in the Dorr Thickener separation process.

The total yearly amounts of water pumped at that time by the nine Delaware and Hudson Coal Company collieries was tremendous--"approximately eighty-five million tons of water per year and its pumps have a total pumping capacity of approximately 311,155,200 tons, which is sufficient to furnish the entire water supply for the eight cities of Boston, Worcester and Springfield, Massachusetts; of Albany, Schenectady, Utica, Syracuse and Rochester, New York."

Although the company appeared to be proud of its water pumping capacities, no technical descriptions of the pumping apparatus were included in the above cited publication.

In 1927, the Pennsylvania Report of the Department of Mines listed 63 pumps operating at the Marvine Colliery, only eight of which were used to pump accumulated water from the underground tunnels to the surface. The remaining 55 pumps were used for coal processing operations, pumping water from the Lackawanna River at a total capacity of 33,374 gallons per minute.

## **DESCRIPTION OF STRUCTURAL SYSTEMS:**

The sole remaining Marvine Colliery washery pump is situated at the center of a large (approximately 80 to 100 feet in diameter) concrete and steel-lined washery pool. The pump is fastened to a thick upright steel post from which a narrow aqueduct structure, carrying thick water piping, extends to the bank at the southeast edge of the pool.

The aqueduct structure is approximately 40 to 50 feet long and appears to be of steel. It resembles a trussed system bridge, and it is wide enough for a person to walk along from the bank to the pump. However, the present structural soundness of the structure is not known and, therefore, no field examination of the pumping apparatus was undertaken at this time.